

IN THE CLAIMS

Claims 1-48 (canceled)

Claim 49 (currently amended): A method of screening a combinatorial library of materials comprising:

mechanically perturbing an array of a plurality of materials by contacting at least two of the materials simultaneously with probes; ~~and~~

monitoring, with a sensor, a force exerted by each of the materials in response to the mechanical perturbations; and

relating the monitored force to a physical property.

Claim 50 (previously amended): The method of claim 49, wherein the monitoring step comprises measuring, with the sensor, forces exerted on the probes by the materials as functions of displacement of a portion of the material or displacement of the probe.

Claim 51 (previously amended): The method of claim 49, wherein the monitoring step comprises measuring, with the sensor, forces exerted on the probes by the materials as functions of time.

Claim 52 (currently amended): The method of claim 49, wherein the physical property is selected from the group consisting of ~~further comprising relating the monitored force to~~ flexure, uniaxial extension, biaxial compression, shear, indentation, stress and strain at failure, tack, loop tack, melt flow index, Young's modulus, hardness, viscosity, storage modulus, loss modulus ~~or~~ and combinations thereof ~~of the material~~.

Claim 53 (previously amended): The method of claim 49, wherein at least twelve materials are simultaneously mechanically perturbed.

Claim 54 (previously amended): The method of claim 49, wherein at least forty-eight materials are simultaneously mechanically perturbed.

Claim 55 (previously amended): The method of claim 49, wherein at least ninety-six materials are simultaneously mechanically perturbed.

Claims 56-58 (canceled)

Claim 59: (currently amended): ~~The method of claim 49, wherein the probes comprise a test fixture~~ A method of monitoring a combinatorial library of materials comprising:

mechanically perturbing an array of a plurality of materials by contacting at least two of the materials simultaneously with probes; and

monitoring, with a sensor, a force exerted by each of the materials in response to the mechanical perturbations.